

Title (en)

SMART DENTAL IMPLANT SYSTEM FOR AMBULATORY DENTAL CARE

Title (de)

INTELLIGENTES ZAHNIMPLANTATSYSTEM ZUR AMBULANTEN ZAHNPFLEGE

Title (fr)

SYSTÈME D'IMPLANT DENTAIRE INTELLIGENT POUR SOINS DENTAIRES AMBULATOIRES

Publication

EP 4165769 A1 20230419 (EN)

Application

EP 21821838 A 20210614

Priority

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Abstract (en)

[origin: WO2021252999A1] Smart dental implant systems and methods for ambulatory dental care are provided. In some embodiments, the disclosed subject matter includes a crown, adapted to mimic a patient's anatomy and location of the smart dental implant system. The crown can include piezoelectric nanoparticles, disposed on a surface of the crown and adapted to generate electricity from a patient's oral motion. In some embodiments, the disclosed subject matter includes an abutment, coupled to the crown. The abutment can include an energy harvesting circuit, operationally coupled to the piezoelectric nanoparticles and adapted to harvest the electricity, and a micro LED array, operationally coupled to the energy harvesting circuit and adapted to photobiomodulate surrounding peri-implant soft tissue.

IPC 8 full level

H02N 2/18 (2006.01)

CPC (source: EP US)

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